

[Name of Document] Scope of the Patent Claim

[Claim 1]

A gateway device placed on the site of a phone switching station, comprising:

5 a communication line to be connected to a telephone equipment placed on the site of a subscriber;

a voice communication unit operable to perform voice communication with said telephone equipment through said communication line;

10 an identifier generation unit operable to generate a caller identifier for identifying said telephone equipment and an intended recipient identifier for identifying a communication equipment of the intended recipient of said telephone equipment on the basis of a control signal from said 15 telephone equipment;

a conversion unit operable to convert voice signals of said voice communication into packet signals and vice versa; and

20 a packet transmitter receiver unit operable to transmit and receive said packet signals on the basis of said caller identifier and said intended recipient identifier.

[Claim 2]

The gateway device as claimed in claim 1 further comprising: a determination unit operable in order that said 25 voice signals are output to a subscriber line exchange without conversion into packet signals depending upon said intended recipient identifier.

[Claim 3]

The gateway device as claimed in claim 1 wherein said 30 determination unit is provided with a subscriber database for registering a default communication network and a communication network to be connected respectively for said subscribers in association with said intended recipient identifier, and searches said subscriber database on the basis 35 of said intended recipient identifier in order to select a communication network to be connected on the basis of the search result.

[Claim 4]

A voice conversation system for use in voice

conversation through a phone switching station with a telephone equipment placed on the site of a subscriber, comprising:

5 a communication line to be connected to a telephone equipment placed on the site of a subscriber;

 a voice communication unit operable in the phone switching station side to perform voice communication with said telephone equipment through said communication line;

10 an identifier generation unit operable in the phone switching station side to generate a caller identifier for identifying said telephone equipment and an intended recipient identifier for identifying a communication equipment of the intended recipient of said telephone equipment on the basis of a control signal from said telephone equipment;

15 a conversion unit operable to convert voice signals of said voice communication into packet signals and vice versa; and

20 a packet transmitter receiver unit operable in the phone switching station side to transmit and receive said packet signals on the basis of said caller identifier and said intended recipient identifier.

[Claim 5]

The voice conversation system as claimed in claim 4 further comprising an access multiplexer operable to transmit and receive the digital signals separated as packet signals from signals which are transmitted and received through said communication line.

[Claim 6]

The voice conversation system as claimed in claim 4 further comprising a determination unit operable in order that said voice signals are output to a subscriber line exchange without conversion into packet signals depending upon said intended recipient identifier.

[Claim 7]

35 The voice conversation system as claimed in claim 6 wherein said determination unit is provided with a subscriber database for registering a default communication network and a communication network to be connected respectively for said subscribers in association with said intended recipient

identifier, and searches said subscriber database on the basis of said intended recipient identifier in order to select a communication network to be connected on the basis of the search result.

5 [Claim 8]

A voice conversation method for use in voice conversation through a phone switching station with a telephone equipment placed on the site of a subscriber, comprising:

10 a step of transmitting and receiving voice signals in the phone switching station side through a communication line connected to said telephone equipment;

a step of generating a caller identifier for identifying said telephone equipment and an intended recipient identifier
15 for identifying a communication equipment of the intended recipient of said telephone equipment on the basis of a control signal from said telephone equipment, and converting voice signals of said voice communication into packet signals and vice versa in the phone switching station side; and

20 a step of transmitting and receiving said packet signals on the basis of said caller identifier and said intended recipient identifier in the phone switching station side.

[Claim 9]

The voice conversation method as claimed in claim 8
25 wherein the digital signals separated from signals which are transmitted and received through said communication line are transmitted and received as packet signals in the phone switching station side.

[Claim 10]

30 The voice conversation method as claimed in claim 8 wherein said voice signals are output to a subscriber line exchange in the phone switching station side without conversion into packet signals depending upon said intended recipient identifier.

35 [Claim 11]

The voice conversation method as claimed in claim 8 wherein, in the phone switching station side,

a subscriber database is provided for registering a default communication network and a communication network to

be connected respectively for said subscribers in association with said intended recipient identifier, and

5 said subscriber database is searched on the basis of said intended recipient identifier in order to select a communication network to be connected on the basis of the search result.